CLAIMS

What is claimed is:

1. An optical method for detecting an object, said optical method comprising:

generating a plurality of coded signals;

communicating said plurality of coded signals to a corresponding plurality of light sources;

modulating said plurality of light sources according to said plurality of coded signals;

emitting a modulated light beam to said object from said plurality of light sources;

receiving a reflected modulated light beam reflected from said object;

de-modulating said reflected modulated light beam to obtain a code information therewithin ; and

determining a status of said object according to said de-modulated code information of said reflected modulated light beam.

2. The optical method according to claim 1, wherein said plurality of coded signals are coded in binary coding.

3. The optical method according to claim 1, wherein said plurality of light sources have different emitting angle within a light

emitting source flat array.

4. The optical method according to claim 1, wherein said plurality of light sources have different illumination within a light emitting source flat array.

5. The optical method according to claim 3, further comprising a plurality of lens located in front of said plurality of light sources to focus said modulated light beam that is emitted from said plurality of light sources.

6. The optical method according to claim 1, wherein said receiving said reflected modulated light beam can be a photosensitive device, wherein wavelength of said photosensitive device is same as said plurality of said light sources.

7. The optical method according to claim 5, further comprising a wave filter located in front of said photosensitive device, wherein wavelength of said wave filter is same as said photosensitive device.

8. An optical method for detecting an object, said optical method comprising:

providing a plurality of coded signals, wherein said plurality of

coded signals are coded in binary coding;

communicating said plurality of coded signals to a corresponding plurality of light sources;

emitting a plurality of modulated light beam to said object;

receiving a plurality of reflected modulation light beam from said object;

de-modulating said plurality of reflected modulation light beam to obtain a code information therewithin; and

determining the status of said object according to said de-modulated code information.

9. The optical method according to claim 8, wherein said plurality of light sources have different emitting angle within a light emitting source flat array.

10. The optical method according to claim 8, wherein said plurality of light sources have different illumination within a light emitting source flat array.

11. The optical method according to claim 8, wherein said object which reflected a first reflected modulated light beam in a first reflected time that is near said light emitting source flat array.

12. The optical method according to claim 8, wherein said

object reflecting a second reflected modulated light beam in a second reflected time is far away said light emitting source flat array, wherein said second reflected time is longer than said first reflected time.

13. The optical method according to claim 8, wherein said object with short height that reflected a first reflected modulation light beam in a first reflected time.

14. The optical method according to claim 8, wherein said object reflecting a second reflected modulation light beam in a second reflected time that is object with higher height.

15. An optical detecting object apparatus, said apparatus comprising:

a digital circuit, said digital circuit generating a plurality of coded signals;

a multiplex, said multiplex communicating said plurality of coded signals to a corresponding plurality of light sources;

said plurality of light sources emitting the modulated light beam to detect an object;

a plurality of lens, said plurality of lens located in front of said plurality of said light sources and focused said modulation light beam;

at least a photosensitive device, at least said photosensitive device located within said plurality of light sources to receive a

reflected modulated light beam;

at least a wave filter, at least said wave filter located in front of at least said photosensitive device; and

a treatment device, said treatment device used to treat said plurality of said reflected modulated light beam and said corresponding code information within to determine a status of said object.

16. The apparatus according to claim 15, wherein said plurality of coded signal is coded in binary code.

17. The apparatus according to claim 15, wherein said plurality of light sources with different emitting angle within a light emitting source flat array.

18. The apparatus according to claim 15, wherein said plurality of light sources with different illumination within a light emitting sources flat array.

19. The apparatus according to claim 15, wherein the wavelength of said plurality of lens is same as said plurality of light sources.

20. The apparatus according to claim 15, wherein the wavelength of at least said photosensitive device is same as said

plurality of light sources.

21. The apparatus according to claim 15, wherein the wavelength of said wave filter is same as at least said photosensitive device.